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COLORADO SHEEP AND LAMB LOSSES -- 2009

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Colorado farmers and ranchers lost 36,000 head of sheep and lambs to all causes in 2009, representing a total value of \$3.84 million, according to a survey conducted in January 2010 by the Colorado Agricultural Statistics Service. A comparable survey for 2007 indicated that 42,000 head of all sheep and lambs, valued at \$4.49 million, were lost from all causes. The number of head lost was down 14 percent from 2007. The total inventory of all sheep and lambs at the beginning of 2010 was 375,000 head, down 11 percent from the total inventory of 420,000 head at the beginning of 2008. The beginning inventory of 190,000 in 2010 for the head of breeding sheep and lambs is down 10 percent from 2008, while the inventory of market sheep and lambs, at 185,000 head, was down 12 percent from 210,000 head. The 2009 lamb crop totaled 180,000 head, down 14 percent from 2007. Total sheep and lamb death losses in 2009 accounted for 6.4 percent of the available supply of animals during the year.

Predators caused an estimated \$1.67 million in losses of sheep and lambs during 2009 compared with a value of \$2.44 million in 2007. They accounted for 16,000 head (44 percent of all losses) in 2009 compared with 23,800 head (57 percent of all losses) in 2007. Predator losses represented 2.8 percent of the available supply in 2009, down from the 3.9 percent of the sheep and lamb supply in 2007. Lamb losses by all predators amounted to 12,500 head in 2009 compared to 18,900 head in the previous year. Coyotes, the most damaging predator, were responsible for 56 percent (8,900 head valued at \$884,800) of the total sheep and lamb losses to predators. Bears were the next most damaging predator claiming a total of 3,800 head of sheep and lambs valued at \$436,200. Foxes and mountain lions killed 1,500 head of sheep and lambs valued at \$161,600 during 2009. Eighty-six percent of all predator losses occurred in the Northwest & Mountain and Southwest Districts. Most of the state's losses from eagles and bobcats were in those two areas. Coyotes and dogs were the major predators in the Northeast and San Luis Valley Districts.

The total value of sheep and lamb losses from **non-predator causes** was estimated at \$2.17 million in 2009, up 6 percent from \$2.05 million in 2007. Non-predator losses of 20,000 head in 2009 represented 56 percent of all losses, up from 18,200 head (43 percent) in 2007. Total Diseases accounted for the loss of 2,700 head of sheep and lambs in 2009, down from 4,800 head in 2007. Respiratory problems were the most damaging non-predator factor in sheep and lamb losses at 4,400 head (22 percent), this was reported in the 'other causes' category in previous years. Eighty-six percent of all non-predator losses occurred in the Northwest & Mountain, Northeast and Southwest Districts. Thirty-four percent of the non-predator losses occurred in the Northeast District where disease and respiratory problems are the major cause of loss in the state's commercial feedlots.

SHEEP & LAMBS: Inventory, Death Losses, and Value of Losses, Colorado, 2002-2009 1/

| | January 1 | | | <u> </u> | Dea | th Losses | | |
|------|----------------------|--------------|-----------------|-------------------|------------------|--------------|---------------|------------------------------|
| | Inventory | | Sheep | | All Lambs | | All Shee | ep & Lambs |
| Year | All Sheep & Lambs | Lamb Crop | Total Losses | Before Docking | After Docking | All Lambs | Total Loss | Percent of Supply <u>2</u> / |
| | 1,000 I | Head | | | 1,000 Head | | | Percent |
| 2002 | 370 | 200 | 13 | 16 | 30 | 46 | 59 | 10.1 |
| 2004 | 360 | 165 | 5 | 9 | 19 | 28 | 33 | 6.2 |
| 2005 | 365 | 175 | 6 | 10 | 22 | 32 | 38 | 6.9 |
| 2007 | 420 | 180 | 11 | 12 | 19 | 31 | 42 | 6.9 |
| 2009 | 375 | 180 | 9 | 10 | 17 | 27 | 36 | 6.4 |

| | To | otal Sheep & Lam | b Losses By Cau | Value Of Losses | | | | |
|------|-----------------|------------------|-----------------|------------------------------|---------------------------|---------|---------|--|
| | Predator Losses | | Non-Pred | lator Losses | | | | |
| Year | Total Loss | | | Percent of Supply <u>2</u> / | Non- Predator Predator | | Total | |
| | 1,000 Head | Percent | 1,000 Head | Percent | | \$1,000 | | |
| 2002 | 28.0 | 4.8 | 31.0 | 5.3 | 2,076.5 | 2,197.5 | 4,274.0 | |
| 2004 | 15.3 | 2.9 | 17.7 | 3.3 | 1,490.0 | 1,735.0 | 3,225.0 | |
| 2005 | 14.6 | 2.6 | 23.4 | 4.3 | 1,579.5 | 2,558.5 | 4,138.0 | |
| 2007 | 23.8 | 3.9 | 18.2 | 3.0 | 2,441.8 | 2,050.3 | 4,492.1 | |
| 2009 | 16.0 | 2.8 | 20.0 | 3.5 | 1,671.0 | 2,166.5 | 3,837.5 | |

^{1/}No survey was conducted covering 2003, 2006, or 2008. 2/ Supply includes sheep and lambs on hand January 1 plus lamb crop plus lamb losses before docking.

SHEEP & LAMBS: Number of Head and Value of Loss by Cause, Colorado, 2007 and 2009 1/

| | | She | еер | | | Lan | ıbs | | , | Total Sheep | & Lambs | |
|---------------------------------|---------|-------------|---------|------------|------------|------|---------|--------------|------------|-------------|---------|--------------|
| Cause | No. L | ost | Value | <u>2</u> / | No. 1 | Lost | Valu | e <u>2</u> / | No. | Lost | Value | e <u>2</u> / |
| | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 |
| Predators: | 1,000 H | Head | \$1,000 | | 1,000 Head | | \$1,000 | | 1,000 Head | | \$1,000 | |
| Bear | 1.8 | 1.4 | 295.8 | 221.8 | 6.1 | 2.4 | 528.3 | 214.4 | 7.9 | 3.8 | 824.1 | 436. 2 |
| Bobcat | .3 | .1 | 49.3 | 15.8 | | .5 | | 44.7 | .3 | .6 | 49.3 | 60.5 |
| Coyote | 2.2 | 1.3 | 361.5 | 205.9 | 9.9 | 7.6 | 857.3 | 678.9 | 12.1 | 8.9 | 1,218.8 | 884.8 |
| Dog | .1 | .2 | 16.4 | 31.7 | .4 | .1 | 34.6 | 8.9 | .5 | .3 | 51.0 | 40.6 |
| Eagle | | | | | .2 | .3 | 17.3 | 26.8 | .2 | .3 | 17.3 | 26.8 |
| Fox | | .1 | | 15.8 | .8 | .6 | 69.3 | 53.6 | .8 | .7 | 69.3 | 69.4 |
| Mountain Lion | .4 | .3 | 65.7 | 47.5 | 1.0 | .5 | 86.6 | 44.7 | 1.4 | .8 | 152.3 | 92.2 |
| Other Predators <u>3</u> / | .1 | .1 | 16.4 | 15.8 | .5 | .5 | 43.3 | 44.7 | .6 | .6 | 59.7 | 60.5 |
| Total Predators | 4.9 | 3.5 | 805.1 | 554.3 | 18.9 | 12.5 | 1,636.7 | 1,116.7 | 23.8 | 16.0 | 2,441.8 | 1,671.0 |
| Non-Predators: | | | | | | | | | | | | |
| Diseases | .8 | .5 | 131.5 | 79.2 | 4.0 | 2.2 | 346.4 | 196.5 | 4.8 | 2.7 | 477.9 | 275.7 |
| Digestive Problems <u>4</u> / | | .3 | | 47.5 | | 1.3 | | 116.1 | | 1.6 | | 163.6 |
| Respiratory Problems <u>4</u> / | | .4 | | 63.4 | | 4.0 | | 357.3 | | 4.4 | | 420.7 |
| Weather related | .8 | 1.2 | 131.5 | 190.1 | 4.1 | 1.9 | 355.1 | 169.7 | 4.9 | 3.1 | 486.6 | 359.8 |
| Lambing problems | 1.2 | .8 | 197.2 | 126.7 | 2.2 | 2.3 | 190.5 | 205.5 | 3.4 | 3.1 | 387.7 | 332.2 |
| Old age | 1.7 | .9 | 279.3 | 142.6 | | | | | 1.7 | .9 | 279.3 | 142.6 |
| Poisoning | .6 | .7 | 98.6 | 110.9 | .6 | .7 | 52.0 | 62.5 | 1.2 | 1.4 | 150.6 | 173.4 |
| Theft | | | | | .2 | | 17.3 | | .2 | | 17.3 | |
| Other causes <u>5</u> / | 1.0 | .7 | 164.3 | 110.9 | 1.0 | 2.1 | 86.6 | 187.6 | 2.0 | 2.8 | 250.9 | 298.5 |
| Total Non-Predators | 6.1 | 5.5 | 1,002.4 | 871.3 | 12.1 | 14.5 | 1,047.9 | 1,295.2 | 18.2 | 20.0 | 2,050.3 | 2,166.5 |
| Total All Causes | 11.0 | 9.0 | 1,807.5 | 1,425.6 | 31.0 | 27.0 | 2,684.6 | 2,411.9 | 42 | 36.0 | 4,492.1 | 3,837.5 |

^{1/} Includes all lambs losses before and after docking. 2/ Sheep value is based on a two year average value per head of ewes 1 year old and older. Lamb value is based on the marketing year average price received for a 90 pound lamb. Survey was not conducted in 2008. Totals may not add due to rounding. 3/ Includes ravens, vultures, wolves and unknown predators 4/ Digestive and respiratory problems have been included in the other category in previous years. 5/ Includes unknown non-predator causes.

SHEEP & LAMBS:
Percent of Head Loss Within Each Agricultural Statistics District, by Type of Predator, Colorado, 2009 1/

| Tercent of 11 | Agricultural Statistics District | | | | | | | | | |
|----------------------------|----------------------------------|-----------|-----------------|-----------|--------------------|-----------|-------|--|--|--|
| Cause | NW & Mountain | Northeast | East Central | Southwest | San Luis Valley | Southeast | State | | | |
| Predators: | | | | Percent | | | | | | |
| Bear | 44.7 | | | 50.0 | 5.3 | | 100.0 | | | |
| Bobcat | 66.7 | | | 33.3 | | | 100.0 | | | |
| Coyote | 46.1 | 5.6 | 3.4 | 32.6 | 11.2 | 1.1 | 100.0 | | | |
| Dog | | 33.3 | | 33.3 | 33.3 | | 100.0 | | | |
| Eagle | 33.3 | | | 66.7 | | | 100.0 | | | |
| Fox | 57.1 | | | 42.9 | | | 100.0 | | | |
| Mountain Lion | 25.0 | | | 75.0 | | | 100.0 | | | |
| Other Predators <u>2</u> / | | | | 100.0 | | | 100.0 | | | |
| Total Predators | 43.1 | 3.8 | 1.9 | 42.5 | 8.1 | .6 | 100.0 | | | |

 $[\]underline{1}/$ Includes all lamb losses both before and after docking. Totals may not add due to rounding. $\underline{2}/$ Includes ravens, vultures, wolves and unknown predators.

SHEEP & LAMBS:
Percent of Head Loss Within Each Agricultural Statistics District, by Non-predator Causes, Colorado, 2009 1/

| | Agricultural Statistics District | | | | | | | | |
|---------------------------------|----------------------------------|-----------|-----------------|-----------|--------------------|-----------|-------|--|--|
| Cause | NW & Mountain | Northeast | East Central | Southwest | San Luis Valley | Southeast | State | | |
| Non-Predators: | | | | Percent | | | | | |
| Total Diseases | 18.5 | 48.2 | 3.7 | 11.1 | 18.5 | | 100.0 | | |
| Digestive Problems <u>2</u> / | 18.8 | 43.8 | 6.3 | 31.3 | | | 100.0 | | |
| Respiratory Problems <u>2</u> / | 13.6 | 72.7 | 4.6 | 9.1 | | | 100.0 | | |
| Weather related causes | 48.4 | 12.9 | 9.7 | 25.8 | 3.2 | ••• | 100.0 | | |
| Lambing problems | 16.1 | 9.7 | 9.7 | 38.7 | 6.5 | 19.4 | 100.0 | | |
| Old age | 11.1 | 11.1 | | 77.8 | | ••• | 100.0 | | |
| Poisoning | 42.9 | | | 50.0 | 7.1 | | 100.0 | | |
| Theft | | | | | | | | | |
| Other non-predators <u>3</u> / | 39.3 | 28.6 | 3.6 | 21.4 | 7.1 | | 100.0 | | |
| Total Non-Predators | 26.0 | 34.0 | 5.5 | 26.0 | 5.5 | 3.0 | 100.0 | | |

 $[\]underline{1}$ / Includes all lamb losses both before and after docking. Totals may not add due to rounding. $\underline{2}$ / Digestive and respiratory problems have been included in the other category in previous years. $\underline{3}$ / Includes unknown non-predator causes.

SHEEP & LAMBS: Percent of Head Loss by Cause and Size of Flock, Colorado, 2007-2009 1/

| | S | tock Shee | p Operati | ons by Si | ze of Floc | k | Commercial All | | | |
|---------------------------------|--------|-----------|-----------|-----------|------------|-------|----------------|-------------|---------|-------|
| Cause | 1 - 99 | | 100 - | 500 | 500 I | Plus | Feed | lots | Sizes | |
| | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 | 2007 | 2009 |
| Predators: | Pero | cent | Perc | ent | Perc | ent | Perc | ent | Percent | |
| Bear | 3.4 | .1 | 6.7 | 6.2 | 9.8 | 16.7 | | 5.2 | 6.3 | 9.7 |
| Bobcat | | | | 3.4 | 1.7 | 2.2 | | .7 | 0.9 | 1.7 |
| Coyote | 17.4 | 18.5 | 21.8 | 32.1 | 31.8 | 32.8 | 5.1 | 13.5 | 23.4 | 25.7 |
| Dog | 7.3 | 4.1 | 4.4 | .7 | 2.8 | .6 | 0.7 | | 2.8 | 1.0 |
| Eagle | | | 0.1 | .6 | 1.8 | 1.4 | | | 1.0 | .7 |
| Fox | 0.8 | .2 | 1.7 | 4.4 | 1.7 | 1.5 | | 1.5 | 1.2 | 1.8 |
| Mountain Lion | 1.3 | .2 | 4.4 | 4.4 | 1.3 | 3.1 | | .4 | 1.3 | 2.2 |
| Other Predators <u>2</u> / | 0.7 | 7.1 | 1.0 | 2.2 | 1.7 | 1.6 | | .3 | 1.1 | 2.2 |
| Total Predators | 30.8 | 30.2 | 40.1 | 54.0 | 52.6 | 59.9 | 5.8 | 21.6 | 38.0 | 45.0 |
| Non-Predators: | | | | | | | | | | |
| Diseases | 13.7 | 2.5 | 16.3 | 3.7 | 21.6 | 6.0 | 77.0 | 25.0 | 33.1 | 9.8 |
| Digestive Problems <u>3</u> / | | 3.7 | | 1.3 | | 2.8 | | 7.9 | | 4.0 |
| Respiratory Problems <u>3</u> / | | 9.3 | | 3.2 | | 4.0 | | 25.6 | | 10.0 |
| Weather related | 8.5 | 11.6 | 9.1 | 25.3 | 5.0 | 3.2 | 2.0 | 5.4 | 5.0 | 8.4 |
| Lambing problems | 19.4 | 26.6 | 14.8 | 5.6 | 7.2 | 10.6 | | | 7.5 | 9.7 |
| Old age | 6.6 | 8.1 | 7.2 | 2.7 | 3.4 | 1.4 | | | 3.4 | 2.3 |
| Poisoning | 1.5 | 2.1 | 0.3 | .3 | 3.6 | 4.0 | | 2.8 | 2.2 | 2.8 |
| Theft | 1.4 | | 2.1 | .5 | | 1.2 | | | 0.4 | .6 |
| Other non-predators <u>4</u> / | 18.1 | 5.9 | 10.3 | 3.4 | 6.6 | 6.9 | 15.2 | 11.7 | 10.4 | 7.4 |
| Total Non-Predators | 69.2 | 69.8 | 59.9 | 46.0 | 47.4 | 40.1 | 94.2 | 78.4 | 62.0 | 55.0 |
| Total All Causes | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Total All Causes 100.0 1